

**REMARKS**

This paper is presented in response to the final official action dated April 1, 2010, wherein (a) claims 1-3, 7, and 10-12 were pending, (b) claims 1-3, 7, 10, and 11 were rejected as being obvious over Patel in view of Kirckof, and (c) claim 12 was rejected as being obvious over Patel and Kirckof in view of Schmidt.

This response accompanies the filing of a request for continued prosecution ("RCE").

By the foregoing, independent claims 1 and 10 have been amended to recite that a product formed in a reaction between at least one compound (A) and the organic metal compound (B) discolours into a definitely different color in a particular pH range due to a pH change caused by hydrogen peroxide and an oxidative force in plasma treatment. Support is found at page 5, lines 5-8 of the specification.

Claims 1-4, 7, and 10-12 remain pending and at issue, with claims 1 and 10 being independent.

The respective obviousness rejections are respectfully traversed, and reconsideration of the application, as amended, is solicited.

In the present invention, discoloring occurs according to an entirely different mechanism from that of Patel. In the present invention, a product formed in a reaction between at least one compound (A) and an organic metal compound (B) discolours into a definitely different color in a particular pH range due to a pH change caused by hydrogen peroxide and an oxidative force in plasma treatment, and a metal ion which is a cation participates in the reaction.

In contrast, in Patel, reactive species, which are anions such as a bromine anion, a chlorine anion, or the like are generated from an activator by exposing the activator to oxidative plasma. The generated, reactive species attaches to the substrate dye, and thereby a color changeable indicator is produced, and discoloration based on the color changeable indicator is effected with a pH, as shown on page 7 of Patel.

Further, aluminum acetylacetonate cited in Patel used is a source for generating acetylacetonate **anions**. In contrast, in an embodiment of the present

invention, aluminum acetylacetonate is used as a source for generating aluminum ***cations***.

The color change mechanism of Patel is also entirely different from that in the present invention. Therefore, even if Patel were to use the same dye and aluminum chelate as the present invention, a compound thereof after a color change would be entirely different from that of the present invention.

The Kirckof and Schmidt references neither teach nor suggest the subject matter of the present invention, especially the technical features discussed above, and do not supply the deficiencies of Patel.


Therefore, even if the teachings of Patel were considered in view of Kirckof and Schmidt, a person skilled in the art could not have accomplished the subject matter of the present invention. As a result, the present invention is not obvious over the disclosure of Patel in view of Kirckof and Schmidt.

Accordingly, reconsideration and withdrawal of the obviousness rejections and allowance of all claims 1-3, 7, and 10-12 are earnestly solicited.

Should the examiner wish to discuss the foregoing or any matter of form in an effort to advance this application toward allowance, she is urged to telephone the undersigned at the indicated number.

June 21, 2010

Respectfully submitted,

By   
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